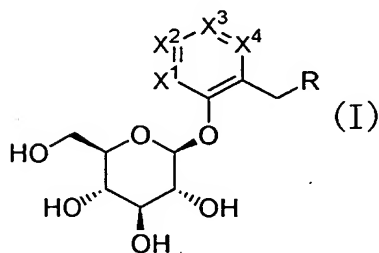


ABSTRACT

The present invention provides nitrogen-containing heterocyclic derivatives represented by the general formula:



wherein X^1 represents N or CR^1 ; X^2 represents N or CR^2 ; X^3 represents N or CR^3 ; X^4 represents N or CR^4 ; and with the proviso that one or two of X^1 to X^4 represent N; R represents optionally substituted C_{3-8} cycloalkyl, optionally substituted C_{6-10} aryl, etc.; R^1 to R^4 represent H, a halogen atom, etc.) or pharmaceutically acceptable salts thereof, or prodrugs thereof, which exert an excellent inhibitory activity in human SGLT2 and are useful as agents for the prevention or treatment of a disease associated with hyperglycemia such as diabetes, diabetic complications, obesity or the like, pharmaceutical compositions comprising the same, and medicinal uses thereof.